

LINE-1 RETROTRANSPOSON EXPRESSION IN HUMAN BREAST AND LUNG
CANCERS.

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Running title: L1 expression in breast and lung cancer.

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Abbreviations: LINE-1, long interspersed element one; L1, LINE-1;
L1Hs, human LINE-1.

SUMMARY

Breast and lung tumor cell lines were examined by Western blotting with an antibody to a protein (p40) encoded by the human LINE-1 retrotransposon (L1Hs). Seven of eight breast tumor cell lines and five of six lung tumor cell lines were positive for low-to-moderate levels of p40. Two normal breast epithelial lines, as well as five B- and T-cell lines, contained no detectable p40. The results suggest that L1Hs is expressed in a large number of breast and lung tumors and that L1Hs proteins may play a role in the initiation and/or progression of the malignant state.